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DIGIMARC CORPORATION  
19801 SW 72ND AVENUE  
SUITE 100  
TUALATIN, OR 97062

EXAMINER

MILLER, RYAN J

ART UNIT

PAPER NUMBER

2621

DATE MAILED: 02/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/507,096

Applicant(s)

DAVIS ET AL.

Examiner

Ryan J. Miller

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 July 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 38-71 is/are pending in the application.
- 4a) Of the above claim(s) 52-62 and 69-71 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 38-51 and 63-68 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 February 2000 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☒ Interview Summary (PTO-413) Paper No(s) 7.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. This action is in response to the preliminary amendment filed on July 6, 2000. The preliminary amendment has been entered and was fully considered. Claims 38-71 were pending upon entry of the amendment.

#### ***Election/Restrictions***

2. Restriction to one of the following inventions is required under 35 U.S.C. 121:
- I. Claims 38-51 and 63-68, drawn to encoding auxiliary data in a media signal, classified in class 382, subclass 100.
  - II. Claims 52-62, drawn to querying a database to request data associated with a media signal, classified in class 707, subclass 104.1.
  - III. Claims 69-71, drawn to maintaining a transaction history, classified in class 709, subclass 224.

The inventions are distinct, each from the other because of the following reasons:

3. Inventions I, II, and III are related as combination and subcombination. Inventions in this relationship are distinct if it can be shown that (1) the combination as claimed does not require the particulars of the subcombination as claimed for patentability, and (2) that the subcombination has utility by itself or in other combinations (MPEP § 806.05(c)). In the instant case, the combination as claimed does not require the particulars of the subcombination as claimed because claim 1, which is one of the broadest combination claims, does not require the particulars, querying a database to determine the additional information in the media signal, of claim 52, the broadest subcombination claim in Group II. Claim 1 does not require the particulars, maintaining a transaction history, of claim 69, the broadest subcombination claim in

Group III, either. The subcombinations have a separate utility such as a) the subcombination in Group II can be used to retrieve data from various types of databases, such as a statistical database, a database of personal attributes such as height, weight, etc., or a financial database and b) the subcombination of Group III can be used to maintain the transaction history of various types of networked devices from banking transactions to transactions at a gasoline pump.

4. During a telephone conversation with Joel Meyer on January 27, 2003 a provisional election was made with traverse to prosecute the invention of Group I, claims 38-51 and 63-68. Affirmation of this election must be made by applicant in replying to this Office action. Claims 52-62 and 69-71 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

5. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

### ***Drawings***

6. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "50" in the specification and "112" in Fig. 1 have both been used to designate ports. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

*Specification*

7. The examiner requests that the applicant provide the serial number of the co-pending application cited on page 1, line 4 and page 14, line 27.

*Claim Rejections - 35 USC § 102*

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

9. Claims 38-51, and 63-68 are rejected under 35 U.S.C. 102(e) as being anticipated by Narayanaswami et al. (U.S. patent Application Publication No. US2003/0011684 A1). As applied to claim 38, Narayanaswami et al. discloses a media signal capture device (see Fig. 1: Reference numeral 100 referring to a camera) including: a recorder for capturing a media signal (see Fig. 1: Reference numeral 128 referring to the camera electronics); and a steganographic encoder for encoding auxiliary data in the media signal (see Fig. 1: Reference numeral 134 referring to a watermark processor).

As applied to claim 39, Narayanaswami et al. discloses the auxiliary data describes attributes of the media signal (paragraph [0043]: The reference describes that the data recorded and watermarked with each image can include image quality, time, location, etc. (i.e. attributes)).

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As applied to claim 40, Narayanaswami et al. discloses that the auxiliary data includes a reference to auxiliary data stored outside the media signal (see paragraph [0043]: The reference describes that one of the parameters that can be watermarked (i.e. auxiliary data) is the compression scheme (JPEG for example). The entire JPEG standard of compression is not watermarked in the image. There is only a reference as to what compression scheme was used. The actual standard is stored somewhere outside of the image.).

As applied to claim 41, Narayanaswami et al. discloses that the auxiliary data includes authentication data for authenticating the media signal (see paragraph [0051]: The reference describes that data from the stamped image (i.e. the watermarked image) can be used to authenticate the image by using the parameters that are embedded in the image data.).

As applied to claim 42, Narayanaswami et al. discloses that the authentication data is derived from the media signal (see paragraph [0051]: The reference describes that data from the stamped image is used to authenticate the image.).

As applied to claim 43, Narayanaswami et al. discloses that the media signal capture device includes an interface for receiving the auxiliary data from an external device (see paragraph [0039]: The reference describes an interface/display 126 which allows the user to keep track of what parameters should or should not be recorded. This interface can be comprised of a keyboard (i.e. external device) to enter text parameters.).

As applied to claim 44, Narayanaswami et al. discloses that the media signal capture device includes an interface for receiving an operating parameter specifying a type of auxiliary data to associate with the media signal (see paragraph [0039]: The reference describes an interface/display 126 which allows the user to keep track of what parameters should or should

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not be recorded in the image. These parameters indicate what type of auxiliary data (i.e. image quality, time, location, etc.) should be associated with the image).

As applied to claim 45, Narayanaswami et al. discloses that the media signal capture device includes an interface for receiving session parameters that govern operation of the media signal capture device during a session (see paragraph [0039]: The reference describes an interface/display 126 that keeps track of which parameters (i.e. session parameters) should or should not be recorded. These parameters include exposure duration, aperture, lens focal length, etc. (i.e. parameters that govern operation of the media signal capture device during a session).).

As applied to claim 46, Narayanaswami et al. discloses that at least one of the session parameters instructs the media signal capture device to preclude a user from altering a device setting during the session (see paragraph [0036]: The reference describes that one of the parameters gives the identity of the photographer. This parameter is supplied by a smart card reader/writer 110. This parameter cannot be changed during a session without removing the smart card. Therefore, this parameter instructs the media signal capture device to preclude a user from altering a device setting during the session.).

As applied to claim 47, Narayanaswami et al. discloses that the session parameters specify auxiliary data to be associated with a media signal captured in the device during a session (see paragraph [0043]: As can be seen from the table these parameters associate data with the image such as exposure duration, aperture, lens focal length, etc.).

As applied to claim 48, Narayanaswami et al. discloses a media signal capture device (see Fig. 1: Reference numeral 100 referring to a camera.) including: a recorder for capturing a media signal (see Fig. 1: Reference numeral 128 referring to camera electronics.); a processing unit for

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associating auxiliary data with the media signal (see Fig. 1: Reference numeral 134 referring to a watermark processor.); and an interface for receiving session parameters that govern operation of the media signal capture device during a session (see Fig. 1: Reference numeral 126 referring to a user interface/display.).

As applied to claim 49, Narayanaswami et al. discloses that the session parameters specify auxiliary data to be associated with media signals captured by the recorder during a session (see paragraph [0043]: As can be seen from the table these parameters associate data with the image such as exposure duration, aperture, lens focal length, etc.).

As applied to claim 50, Narayanaswami et al. discloses that at least one of the session parameters instructs the media signal capture device to preclude a user from altering a device setting during the session (see paragraph [0036]: The reference describes that one of the parameters gives the identity of the photographer. This parameter is supplied by a smart card reader/writer 110. This parameter cannot be changed during a session without removing the smart card. Therefore, this parameter instructs the media signal capture device to preclude a user from altering a device setting during the session.).

As applied to claim 51, Narayanaswami et al. discloses that a session identifier is steganographically encoded in the media signal or metadata associated with the media signal in the session (see paragraphs [0043] and [0045]: The reference describes that the parameters watermarked into the image can include the date and time which are session identifiers. The reference further describes that the watermarked image appears perceptually to be nearly identical to the source image. Therefore, the session identifier is steganographically embedded in the image.).



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As applied to claim 63. Narayanaswami et al. discloses a system including a media signal recorder (see Fig. 1: Reference numeral 128), a computer (see Fig. 1: Reference numeral 102), and an interface for communicating between the recorder and the computer (see Fig. 1: There is clearly an interface for components 128 and 102 to communicate.), an improvement comprising automatically steganographically encoding media signal data with digital watermark data upon transfer to the computer (see Fig. 1: Reference numeral 134 is used to apply an invisible digital watermark to the image.).

As applied to claim 64. Narayanaswami et al. discloses associating metadata in the recorder with a media signal captured in the recorder, transferring said metadata to the computer with the media signal, and associating said metadata in the computer with the digital watermark (see paragraph [0033]: The reference describes an image/parameter processor 106 for recording a plurality of parameters (i.e. metadata) onto an image (i.e. media signal). This information is then digitally watermarked by the watermark processor 134.).

As applied to claim 65. Narayanaswami et al. discloses that the digital watermark data permits detection of subsequent media signal alteration (see paragraph [0051]: The reference describes that the recorded parameters can be compared with the watermarked parameters to determine if the image has been altered in any way.).

As applied to claim 66. Narayanaswami et al. discloses that the encoding is performed by the computer (see paragraph [0033]: The reference describes an image/parameter processor 106 for recording a plurality of parameters onto an image which is then encoded by watermark processor 134. These components are all parts of the of the overall system computer.).

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As applied to claim 67, Narayanaswami et al. discloses method of operating a media signal capture system, the system including a media signal capture device (see Fig. 1: Reference numeral 128 referring to the camera electronics.) and a distinct computer with a user interface (see Fig. 1: Reference numerals 102 and 126, referring to a CPU and a user interface/display, respectively.), the method including providing to the media signal capture device from said computer at least one data item to be steganographically encoded in a media signal captured by the media signal capture device (see paragraph [0033]: The reference describes an image/parameter processor 106, which is part of CPU 102, for recording a plurality of parameters onto an image, obtained from the camera electronics), wherein the user interface of the computer is utilized to specify the data item (see paragraph [0039]: The reference describes an interface/display 126 that keeps track of which parameters should or should not be recorded (i.e. specify the data item)).

As applied to claim 68, Narayanaswami et al. discloses that providing a steganographic link to the media signal capture device from the computer (see Fig. 1: There is clearly a link between components 128 (i.e. media signal capture device) and 102 (i.e. the computer)).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ryan J. Miller whose telephone number is (703) 306-4142. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau can be reached on (703) 305-4706. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9314.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-4750.



Ryan J. Miller  
February 6, 2003

Ryan J. Miller  
Examiner  
Art Unit 2621



**BRIAN WERNER  
PATENT EXAMINER  
ART UNIT 2621**